

SHIP: USS ROSS (DDG-71)

ITEM NO: 261-80-001

COAR: 16-523

PCN: EXTY-6049

EXTY-6064

CMP: NONE

SURVEYOR: PETRIN

MULLOY

1. SCOPE:

1.1 Title: DDG51 Class AER 66049 and AER 66064, Fuel Oil Service and Transfer Heater Elements Replacement; accomplish

1.2 Location of Work:

1.2.1 Engine Room No. One (4-174-0-E)

1.2.2 Engine Room No. 2 (4-254-0-E)

1.2.3 Generator Room (3-370-0-E)

1.3 Identification:

1.3.1 Quantity (2 EA), Fuel Oil Transfer Heater Assembly
Mfr: INDEECO
Part No. 353X-0330

1.3.2 Quantity (2 EA), Fuel Oil Service Heater Assembly
Mfr: INDEECO
Part No. 353X-0329

1.3.3 Quantity (One EA), SSGTG Fuel Oil Service Assembly
Mfr: INDEECO
Part No. 353X-0331

2. REFERENCES:

2.1 Standard Items

2.2 S9261-A6-MMA-010, Fuel Oil Heaters and Controllers, Electric, Circulation Type

2.3 4720-DDG71-FY02-A4, Ship Alteration Material Summary (4720/3)

2.4 802-5959353 Rev. AY, MIL-STD-777D Modified for DDG-51 Class, Schedule of Piping, Valves, Fittings and Associated Piping Components

3. REQUIREMENTS:

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3.1 Remove existing heater elements from the equipment listed in 1.3 and located in 1.2, using 2.2 for guidance. Retain existing mounting fasteners for reuse.

3.1.1 Clean each heater shell interior surface free of foreign matter, using clean, lint free rags.

(V)(G) "CLEANLINESS INSPECTION"

3.1.2 Accomplish a cleanliness inspection of each heater shell prior to heater assembly installation. Inspect surfaces free from dirt, debris, and foreign matter.

3.2 Install new heater bundles to the equipment listed in 1.3 and located in 1.2, including new gaskets in accordance with Chapter 6, Section 2, Paragraph 6.3.2 of 2.2, and 2.3, using mounting fasteners retained in 3.1.

3.2.1 New gaskets shall conform to 2.4, including Category and Group E-5.

(V)(G) "OPERATIONAL TEST"

3.3 Accomplish an operational test of each fuel oil transfer heater listed in 1.3.1 in accordance with the following criteria: Allowable Leakage: None.

3.3.1 Line up the fuel oil purifier and place into operation.

3.3.2 Line up the fuel oil system to take suction from a storage tank via transfer pump, heater, purifier and discharge to a service tank.

3.3.3 Demonstrate that the fuel oil heaters with automatic temperature controls will maintain an outlet temperature of 65-75 Degrees Fahrenheit.

(V)(G) "OPERATIONAL TEST"

3.4 Accomplish an operational test of each fuel oil service heater listed in 1.3.2 and the SSGTG fuel oil service heater listed in 1.3.3 in accordance with the following criteria: Allowable Leakage: None.

3.4.1 Line up each fuel oil service system, to take suction from a service tank, via service booster pump, heater listed in 1.3.2, service pre-filter and filter/coalescer to the gravity head tank and main engine warm up piping, back to service tank.

3.4.2 Line up the fuel oil service system, to take suction from a gravity head tank via heater listed in 1.3.3, during SSGTG No. 3 operation.

3.4.3 Demonstrate that the fuel oil heaters with automatic temperature

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controls will maintain an outlet temperature of 80-90 Degrees Fahrenheit. Fuel oil temperature on outlet side of heater shall not be allowed to exceed 90 degrees Fahrenheit.

3.4.3.1 Submit four legible copies of a report listing test results to the SUPERVISOR.

3.5 Accomplish the requirements of 009-32 of 2.1 for new and disturbed surfaces.

3.6 Install new aluminized cloth spray shields on heater bundle flanges in accordance with ASTM F1138.

4. NOTES:

4.1 None.

5. GOVERNMENT FURNISHED MATERIAL (GFM):

5.1 LLTM:

TOTAL QUANTITY <u>PROVIDED</u>	NAME OF <u>PART</u>	PIECE <u>NO.</u>	REF <u>NO.</u>	NATIONAL <u>STOCK NO.</u>	PARA <u>NO.</u>
1. One KT	Kit for ShipAlt AER 66049	None	2.3	None	3.2
2. One KT	Kit for ShipAlt AER 66064	None	2.3	None	3.2

5.2 PUSH MATERIAL:

1. None

5.3 KITTED MATERIAL:

1. None